NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE HYDROLOGIC SERVICE AREA:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE **SAN JOAQUIN VALLEY - HANFORD , CA**

REPORT FOR:

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

MONTH: **SEPTEMBER** YEAR: **2013**

TO: Hydrometeorological Information Center, W/OH12x1
National Weather Service/Office of Hydrology
1325 East-West Highway #7116
Silver Spring, MD 20910

SIGNATURE:

Kevin Durfee
(In Charge of Hydrologic Service Area)

DATE: October 2, 2013

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts and hydrologic products issued (WSOM E-41).

X	An **X** inside this box indicates that no flooding occurred for the month within this hydrologic service area.

September, 2013 ended up slightly warmer than normal as an upper level ridge of high pressure centered over west Texas dominated the weather pattern across the HSA. During the first 3 weeks, the HSA remained just west of an area of monsoonal moisture over the Desert Southwest. Whenever the upper level ridge shifted westward to the Four Corners region, some of this monsoonal moisture moved into the mountains and desert and provided a favorable environment for the development of isolated showers and thunderstorms. This occurred in the Kern county desert on the 2nd, 4th, 8th and 9th. Mid level tropical moisture extended northwestward into the Sierra on the 10th where it remained through the 14th and triggered isolated afternoon thunderstorms. Otherwise, a dry southwesterly flow aloft prevailed over central California between the upper level ridge to the east and a nearly stationary upper level trough off the Pacific Northwest coast. The hottest period of the month, although brief, occurred from the 7th through the 10th. During this time, temperatures peaked in the triple digits in the San Joaquin Valley, the lower foothills and the Kern county desert as the Four Corners ridge strengthened over California. Despite a shallow intrusion of marine air in the San Joaquin Valley between the 16th and the 19th, temperatures averaged warmer than normal throughout much of the central California interior during the 3rd week of September.

A major change to blustery and much cooler weather occurred during the weekend of the 21st and 22nd as an unusually deep upper level trough moved into California. This system produced brisk winds and areas of blowing dust in the San Joaquin Valley during the afternoon and evening hours of the 21st. Winds buffeted the higher terrain with gusts to 50 mph or higher on the 21st. Showers associated with this upper level trough, although isolated, moved quickly eastward across Merced county and Madera county and into the Sierra foothills during the afternoon of the 21st . The heaviest showers produced a little more than a quarter of an inch of rain in the San Joaquin Valley near Madera and nearly a half inch of rain at Bass Lake while 1.75 inches of rain drenched the community of Fish Camp in Mariposa county. Higher elevations received the first snowfall of the season as the storm system departed into the Great Basin and much colder air flowed in behind it. By the morning of the 22nd , elevations as low as 5500 feet received a dusting of snow. Up to 5 inches of snow fell above 8,000 feet in Mariposa county and produced slick travel along a portion of highway 120 in Yosemite National Park. The timing of this storm system coincided impeccably with the official arrival of Fall on the 22nd and heralded the coolest weather since late May throughout the central California interior. Afternoon temperatures on the 22nd ranged from only the 40s over the highest elevations of the Sierra to the mid and upper 70s in the San Joaquin Valley. Another cold frontal passage on the evening of the 24th passed through rather uneventfully with no precipitation. However, the upper level trough that lagged behind this front brought up to 2 inches of snow over the highest elevations of Yosemite National Park on the 26th. Temperatures briefly recovered to seasonable levels on the 23rd and 24th before trending below normal again behind the second cold front on the 25th and 26th. The coolness of Autumn returned to the HSA during this time with overnight minimum temperatures plummeting into the teens over the high Sierra, the upper 30s in the Kern county desert and the mid to upper 40s in the chilliest locations of the San Joaquin Valley. As September drew to a close, a weak ridge of high pressure aloft brought dry weather to the HSA with a return of warmer than normal temperatures during the final 3 days of the month.

Water levels remained quite low at all of the major reservoirs, which, as of October 1st, were only at about 18 percent of their normal capacity.

HYDROLOGIC PRODUCTS ISSUED THIS MONTH

Flash Flood Watch….Sierra Nevada…Kern County mountains/desert	0944Z	01-SEP

cc:

W/OH12x1
W/WR2
CNRFC
WFO HNX
WFO STO